

**REMARKS**

Claims 25 to 55 are pending. Claim 36 has been amended. Claims 1 to 24 were previously cancelled. Claims 25 to 52 and 55 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication 2003/0126256 to Cruickshank et al. ("Cruickshank"). Claims 53 and 54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cruickshank in view of Official Notice.

Reconsideration of the application in light of the following remarks is respectfully requested.

**Amendment of Claim 36**

Claim 36 has been amended to correct a typographical error pointed out in the Office Action, page 2. Claim 36 now reads, in pertinent part, "at least one of . . ." No new matter has been added.

**Rejection based on Cruickshank**

Claims 25 to 52 and 55 were rejected under 35 U.S.C. § 102(e) as being anticipated by Cruickshank. Claims 53 and 54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cruickshank in view of Official Notice. These rejections are respectfully traversed.

Cruickshank describes a system for use with a broadband network to obtain metrics of performance of a portion of the network. *See* paragraph [0005]. The system includes a data-processing apparatus configured to collect raw data associated with network performance and normalize the raw data to obtain a first metric and a data-arranging apparatus configured to graph one of the metrics over time. *See* paragraph [0007]. The system includes a network-metrics

apparatus configured to collect raw data and compare it against thresholds indicative of network performance levels. *See* paragraph [0007].

Independent claim 25 recites “sending measurement packets with an adjustable distribution in time so as to determine first status information” and “assigning the first status information to a first status range of a plurality of fixed status ranges according to at least one first predetermined condition, the first status range being limited by at least one first threshold value.” It is respectfully submitted that Cruickshank does not teach these features of claim 25.

In contrast, Cruickshank collects raw data indicative of network operation. *See* paragraph [0008]. The raw data is compared against threshold levels indicative of network performance levels. *See* paragraph [0007]. The raw data is also combined and manipulated to periodically determine first metrics, wherein the first metrics are indicative of a plurality of levels of network performance. *See* paragraph [0008]. A data collector controller 46 is connected to network elements to help optimize the network 12 and to collect network data, and the controller 46 defines which network devices are polled, what data is collected, and what mechanisms of data collection are used. *See* Figure 2 and paragraph [0030]. The controller 46 synchronously obtains data at predetermined desired time intervals, and passes the data to a data analyzer 44 for further processing. *See* paragraph [0030]. The predetermined time intervals are different, depending on the nature of the raw data collected. *See* paragraph [0047] and Table 1. For example, the metric for cable modem termination system resets (“CMTS resets”) is calculated based on a sample interval of one minute. *See* Table 1 and paragraph [0004]. However, Cruickshank does not disclose that the predetermined time intervals for each particular category of raw data are *adjustable*.

The data analyzer 44 of Cruickshank manipulates the raw data into metrics, discards the raw data, evaluates the metrics against network performance threshold levels, and conveys the metrics to a controller 40. *See* paragraphs [0031], [0032], and [0036]. Different first metrics may be combined to obtain second metrics, and second metrics may be combined to obtain third metrics. *See* Table 5 and paragraph [0006]. The data analyzer 44 receives the raw data more frequently than it conveys the calculated metrics to the controller 40. *See* paragraph [0036]. However, Cruickshank does not disclose that the frequency with which the analyzer conveys the calculated metrics to the controller 40 is *adjustable*.

Cruickshank displays information from the controller 40 on a display 50. *See* Figure 3 and paragraph [0141]. The numbers shown on the display are periodically and automatically updated. *See* paragraph [0141]. The display is hierarchical, showing a summary of the entire network 52 at top, network traffic 54 and network connectivity 56 one level down, and various lower-level contributing metrics lower down, including, for example, CMTS resets 72. *See* Figure 3 and paragraph [0142]. If a particular metric falls within a particular degree of network degradation, it is displayed in a color corresponding to that degree of degradation. *See* Figure 3 and paragraph [0142].

In Cruickshank, thresholds are selected to indicate the degrees of network degradation, wherein multiple thresholds imply ranges of values corresponding to degrees of degradation of network performance. *See* paragraph [0032]. If the calculated metric exceeds the threshold for degraded performance, then the network component is considered degraded, and if the metric exceeds a severely degraded threshold, the network component is considered severely degraded. *See* paragraph [0032]. The analyzer 44 determines the various thresholds using a combination of

computer models, controlled experiments, real-time network information, real-time and historical performance data, and other methods. *See* paragraph [0034]. The thresholds are predetermined, but the thresholds “vary depending upon whether the issues are contributing to network traffic or network connectivity,” that is, the thresholds and corresponding degrees of network degradation are not *fixed*. *See* paragraphs [0034], [0035], and [0149]. Indeed, substantial processing resources are used to calculate them. *See* paragraph [0149].

Claim 25, in contrast, recites sending measurement packets with an adjustable distribution in time. Cruickshank merely describes the collection of raw data at particular intervals which are determined by the nature of the data, but not that the intervals are adjustable. Moreover, Cruickshank merely describes collection of data, it does not disclose measurement packets, which are used to measure and calculate status information and not simply to transmit data. *See* Specification at paragraphs [0049] to [0052]. It is respectfully submitted that Cruickshank does not disclose this feature of claim 25.

Claim 25 also recites assigning the first status information to a first status range of a plurality of fixed status ranges according to at least one first predetermined condition. Cruickshank merely describes multiple variable network degradation thresholds, but not fixed status ranges, as recited. *See* paragraphs [0034], [0035], and [0149]. It is respectfully submitted that Cruickshank does not disclose this feature of claim 25.

Because Cruickshank fails to teach at least the above-recited features of independent claim 25, it cannot anticipate claim 25 or any of its dependent claims. Nor do Cruickshank or Official Notice teach or suggest the above-recited features of claim 25. It is noted that the Examiner has taken unsupported Official Notice. It is respectfully submitted that it would not

have been obvious for one of ordinary skill in the art to provide the alleged combinations. The taking of the Official Notice is therefore respectfully traversed and applicants respectfully request that the Examiner provide substantiation for the Official Notice.

Reconsideration and withdrawal of the anticipation rejection of claims 25 to 52 and 55 under 35 U.S.C. §120(e) based on Cruickshank, and the obviousness rejection of claims 53 and 54 under 35 U.S.C. §103(a) based on a combination of Cruickshank and Official Notice is therefore respectfully requested.

Each and every point raised in the Office Action dated February 22, 2008 has been addressed on the basis of the above remarks. In view of the foregoing it is believed that claims 25 to 55 are in condition for allowance and it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

Dated: June 23, 2008

By AL Franzen

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